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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-----------------------|---------------------|------------------|
| 10/615,882 | 07/08/2003 | Philip Michael Hawkes | 030441 | 9835 |

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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

SIMITOSKI, MICHAEL J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2134

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--|--------------------------------------|--|
| Office Action Summary | Application No. 10/615,882 | Applicant(s) HAWKES ET AL. | |
| | Examiner Michael J Simitoski | Art Unit 2134 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-57 is/are rejected.
- 7) ☒ Claim(s) 3,31 and 49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-57 are pending.
2. The preliminary amendment of 2/2/04 has been received and considered.

Claim Objections

3. Claims 13, 31 & 49 are objected to because of the following informalities:

Regarding claims 13, 31 & 49, "encrypting secret key" should be replaced with "encrypting a secret key".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6-7, 17-18, 26-27, 35-36, 44-45 & 53-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claims 6-7, 17-18, 26-27, 35-36, 44-45 & 53-54 recite the limitation "the secret key" in line 1. There is insufficient antecedent basis for this limitation in the claims. *For the purposes of this Office Action, "the secret key" is understood to be "the access key".*

Claim Rejections - 35 USC § 102

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7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-2, 4-6, 8-10, 12-14, 16-17, 19-20, 22-23, 25-26, 28-29, 31-32, 34-35, 37-38, 40-41, 43-44, 46-47, 49-50, 52-53 & 55-56 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication 2001/0029581 to Knauft.

Regarding claims 1, 22 & 40, Knauft discloses distributing a public key/public machine key corresponding to a private key (§75), receiving a secret key/symmetric user key (§80) encrypted by the public key/public machine key (Fig. 5B, #522 & §75), decrypting the secret key/user key by the private key/private machine key (§80), receiving the access key/symmetric program key encrypted by the secret key/user key (§84) and decrypting the access key/program key by the secret key/user key (§84).

Regarding claims 2, 10, 14, 20, 23, 29, 32, 38, 41, 47, 50 & 56, Knauft discloses the secret key being a registration key/user key (§80).

Regarding claims 4 & 12, Knauft discloses deriving a short key/symmetric session key based on the access key/program key (§85), receiving encrypted broadcast content/data object (§48 & §86) and decrypting the encrypted broadcast content/data object using the short key/session key (§86).

Regarding claims 5, 25 & 43, Knauft discloses distributing a public key/public machine key corresponding to a private key (§75), receiving the access key/user key encrypted by the

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public key/machine key (§73) and decrypting the access key/user key by the private key/machine key (§80).

Regarding claims 6, 17, 26, 35, 44 & 53, as best understood, Knaft discloses the access key being a registration key/user key (§80).

Regarding claim 8, Knaft discloses deriving a short key/program key based on the access key/user key (§84), receiving encrypted broadcast content/data object (§48 & §86) and decrypting the encrypted broadcast content/data object using the short key/program key (§71 & §86).

Regarding claims 9, 28 & 46, Knaft discloses receiving a public key/public machine key corresponding to a private key (§75), encrypting the secret key/user key with the public key/machine key (§75), sending the encrypted secret key/user key (Fig. 5A, #514), receiving the access key/program key encrypted by the secret key/user key (§71 & Fig. 5B, #522) and decrypting the access key/program key by the secret key/user key (§84).

Regarding claims 13, 31 & 49, Knaft discloses receiving a public key/public machine key corresponding to a private key (§75), encrypting a secret key/user key using the public key/machine key (§75), sending the encrypted secret key/user key (Fig. 5A, #514), encrypting the access key/program key using the secret key/user key (§73) and sending the encrypted access key/program key (Fig. 5A, #514).

Regarding claims 16, 34 & 52, Knaft discloses receiving a public key/public machine key corresponding to a private key (§75), encrypting the access key/user key using the public key/machine key (§75) and sending the encrypted access key/user key (Fig. 5A, #514).

Regarding claims 19, 37 & 55, Knauft discloses distributing a public key/public machine key corresponding to a private key (§75), receiving a secret key/symmetric user key (§80) encrypted by the public key/public machine key (Fig. 5B, #522 & §75), decrypting the secret key/user key by the private key/private machine key (§80), encrypting the access key/program key by the secret key/user key (§84) and sending the encrypted access key/program key (Fig. 5A, #514).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3, 7, 11, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54 & 57, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,690,795 to Richards. Knauft lacks the secret key/user key being a temporary key. However, Richards teaches that to reduce the value of information obtained through a successful key attack is to limit the amount of information being protected by a single key (col. 4, lines 30-42). The key is a temporary key only allowing access to a portion of the whole (col. 4, lines 30-42). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a temporary key. One of ordinary skill in the art would have been motivated to perform such a modification to limit the amount of information being protected by a single key, as taught by Richards (col. 4, lines 30-42).

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Simitoski whose telephone number is (571) 272-3841. The examiner can normally be reached on Monday - Thursday, 6:45 a.m. - 4:15 p.m.. The examiner can also be reached on alternate Fridays from 6:45 a.m. - 3:15 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached at (571) 272-3838.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

Or faxed to:

(703)746-7239 (for formal communications intended for entry)

Or:

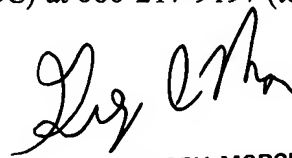
(571)273-3841 (Examiner's fax, for informal or draft communications, please label "PROPOSED" or "DRAFT")

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MJS
November 18, 2004



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